



05/10
05/14

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 1082,747
Source: OPE
Date Processed by STIC: 6/7/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK.SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary

| ERROR DETECTED | SUGGESTED CORRECTION | SERIAL NUMBER: 10/082,747 |
|--|--|---------------------------|
| ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE | | |
| 1 ___ Wrapped Nucleics Wrapped Aminos | The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping." | |
| 2 ___ Invalid Line Length | The rules require that a line not exceed 72 characters in length. This includes white spaces. | |
| 3 ___ Misaligned Amino Numbering | The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead. | |
| 4 ___ Non-ASCII | The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text. | |
| 5 ___ Variable Length | Sequence(s) ___ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing. | |
| 6 ___ PatentIn 2.0 "bug" | A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences. | |
| 7 ___ Skipped Sequences (OLD RULES) | Sequence(s) ___ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences. | |
| 8 ___ Skipped Sequences (NEW RULES) | Sequence(s) ___ missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000 | |
| 9 ___ Use of n's or Xaa's (NEW RULES) | Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents. | |
| 10 ✓ Invalid <213> Response | Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial-Sequence | |
| 11 ___ Use of <220> | Sequence(s) ___ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules) | |
| 12 ___ PatentIn 2.0 "bug" | Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk. | |
| 13 ___ Misuse of n | n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide. | |



OIPE

Does Not Comply
Corrected Diskette Needed

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/082,747

DATE: 06/17/2002

TIME: 12:50:57

Input Set : A:\476112USseqlist.txt

Output Set: N:\CRF3\06172002\J082747.raw

4 <110> APPLICANT: Genentech, Inc.
 5 Ballinger, Marcus D.
 6 Jones, Jennifer T.
 7 Fairbrother, Wayne J.
 8 Sliwowski, Mark X.
 9 Wells, James A.
 12 <120> TITLE OF INVENTION: HEREGULIN VARIANTS
 15 <130> FILE REFERENCE: 402E-476112US
 17 <140> CURRENT APPLICATION NUMBER: US 10/082,747
 C--> 18 <141> CURRENT FILING DATE: 2002-06-10
 20 <150> PRIOR APPLICATION NUMBER: US 09/101,544
 21 <151> PRIOR FILING DATE: 1998-07-17
 23 <150> PRIOR APPLICATION NUMBER: PCT/US/98/01579
 24 <151> PRIOR FILING DATE: 1998-02-10
 26 <150> PRIOR APPLICATION NUMBER: US 08/799,054
 27 <151> PRIOR FILING DATE: 1997-02-10
 29 <160> NUMBER OF SEQ ID NOS: 116
 31 <170> SOFTWARE: FastSEQ for Windows Version 3.0
 33 <210> SEQ ID NO: 1
 34 <211> LENGTH: 71
 35 <212> TYPE: PRT
 36 <213> ORGANISM: Homo sapiens
 38 <220> FEATURE:
 40 <400> SEQUENCE: 1
 41 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
 42 1 5 10 15
 43 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
 44 20 25 30
 45 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
 46 35 40 45
 47 Val Met Ala Ser Phe Tyr Lys His Leu Gly Ile Glu Phe Met Glu Ala
 48 50 55 60
 49 Glu Glu Leu Tyr Gln Lys Arg
 50 65 70
 52 <210> SEQ ID NO: 2
 53 <211> LENGTH: 66
 54 <212> TYPE: PRT
 55 <213> ORGANISM: Homo sapiens
 57 <400> SEQUENCE: 2
 58 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
 59 1 5 10 15
 60 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
 61 20 25 30

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/082,747

DATE: 06/17/2002

TIME: 12:50:57

Input Set : A:\476112USseqlist.txt

Output Set: N:\CRF3\06172002\J082747.raw

```

62 Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn
63      35                      40                      45
64 Val Pro Met Lys Val Gln Asn Gln Glu Lys Ala Glu Glu Leu Tyr Gln
65      50                      55                      60
66 Lys Arg
67 65
69 <210> SEQ ID NO: 3
70 <211> LENGTH: 63
71 <212> TYPE: PRT
72 <213> ORGANISM: Homo sapiens
74 <400> SEQUENCE: 3
75 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
76 1      5                      10                      15
77 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
78      20                      25                      30
79 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
80      35                      40                      45
81 Val Met Ala Ser Phe Tyr Lys Ala Glu Glu Leu Tyr Gln Lys Arg
82      50                      55                      60
84 <210> SEQ ID NO: 4
85 <211> LENGTH: 65
86 <212> TYPE: PRT
87 <213> ORGANISM: Homo sapiens
89 <400> SEQUENCE: 4
90 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
91 1      5                      10                      15
92 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
93      20                      25                      30
94 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
95      35                      40                      45
96 Val Met Ala Ser Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro
97      50                      55                      60
98 Glu
99 65
101 <210> SEQ ID NO: 5
102 <211> LENGTH: 66
103 <212> TYPE: PRT
104 <213> ORGANISM: Rattus rattus
106 <400> SEQUENCE: 5
107 Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
108 1      5                      10                      15
109 Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
110      20                      25                      30
111 Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn
112      35                      40                      45
113 Val Pro Met Lys Val Gln Thr Gln Glu Lys Ala Glu Glu Leu Tyr Gln
114      50                      55                      60
115 Lys Arg
116 65

```

RAW SEQUENCE LISTING

DATE: 06/17/2002

PATENT APPLICATION: US/10/082,747

TIME: 12:50:57

Input Set : A:\476112USseqlist.txt

Output Set: N:\CRF3\06172002\J082747.raw

```

118 <210> SEQ ID NO: 6
119 <211> LENGTH: 71
120 <212> TYPE: PRT
121 <213> ORGANISM: Rattus rattus
123 <400> SEQUENCE: 6
124 Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
125 1 5 10 15
126 Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
127 20 25 30
128 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
129 35 40 45
130 Val Met Ala Ser Phe Tyr Lys His Leu Gly Ile Glu Phe Met Glu Ala
131 50 55 60
132 Glu Glu Leu Tyr Gln Lys Arg
133 65 70
135 <210> SEQ ID NO: 7
136 <211> LENGTH: 63
137 <212> TYPE: PRT
138 <213> ORGANISM: Rattus rattus
140 <400> SEQUENCE: 7
141 Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
142 1 5 10 15
143 Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
144 20 25 30
145 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
146 35 40 45
147 Val Met Ala Ser Phe Tyr Lys Ala Glu Glu Leu Tyr Gln Lys Arg
148 50 55 60
150 <210> SEQ ID NO: 8
151 <211> LENGTH: 64
152 <212> TYPE: PRT
153 <213> ORGANISM: Rattus rattus
155 <400> SEQUENCE: 8
156 Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
157 1 5 10 15
158 Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
159 20 25 30
160 Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn
161 35 40 45
162 Val Pro Met Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro Glu
163 50 55 60
165 <210> SEQ ID NO: 9
166 <211> LENGTH: 81
167 <212> TYPE: PRT
168 <213> ORGANISM: Rattus rattus
170 <400> SEQUENCE: 9
171 Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
172 1 5 10 15
173 Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr

```

RAW SEQUENCE LISTING

DATE: 06/17/2002

PATENT APPLICATION: US/10/082,747

TIME: 12:50:57

Input Set : A:\476112USseqlist.txt

Output Set: N:\CRF3\06172002\J082747.raw

```

174          20          25          30
175 Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn
176          35          40          45
177 Val Pro Met Phe Tyr Ser Met Thr Ser Arg Arg Lys Arg Gln Glu Thr
178          50          55          60
179 Glu Lys Pro Leu Glu Arg Lys Leu Phe His Ser Leu Val Lys Glu Ser
180 65          70          75          80
181 Lys
184 <210> SEQ ID NO: 10
185 <211> LENGTH: 65
186 <212> TYPE: PRT
187 <213> ORGANISM: Homo sapiens
189 <400> SEQUENCE: 10
190 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
191 1          5          10          15
192 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
193          20          25          30
194 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
195          35          40          45
196 Val Met Ala Ser Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro
197 50          55          60
198 Glu
199 65
201 <210> SEQ ID NO: 11
202 <211> LENGTH: 65
203 <212> TYPE: PRT
204 <213> ORGANISM: Homo sapiens
206 <400> SEQUENCE: 11
207 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
208 1          5          10          15
209 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
210          20          25          30
211 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
212          35          40          45
213 Val Met Ala Ser Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro
214 50          55          60
215 Glu
216 65
218 <210> SEQ ID NO: 12
219 <211> LENGTH: 65
220 <212> TYPE: PRT
221 <213> ORGANISM: Homo sapiens
223 <400> SEQUENCE: 12
224 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
225 1          5          10          15
226 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
227          20          25          30
228 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
229          35          40          45

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/082,747

DATE: 06/17/2002

TIME: 12:50:57

Input Set : A:\476112USseqlist.txt

Output Set: N:\CRF3\06172002\J082747.raw

230 Val Met Ala Ser Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro
 231 50 55 60
 232 Glu
 233 65
 235 <210> SEQ ID NO: 13
 236 <211> LENGTH: 71
 237 <212> TYPE: PRT
 238 <213> ORGANISM: Gallus domesticus
 240 <400> SEQUENCE: 13
 241 Ser His Leu Thr Lys Cys Asp Ile Lys Gln Lys Ala Phe Cys Val Asn
 242 1 5 10 15
 243 Gly Gly Glu Cys Tyr Met Val Lys Asp Leu Pro Asn Pro Pro Arg Tyr
 244 20 25 30
 245 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
 246 35 40 45
 247 Val Met Ala Ser Phe Tyr Lys His Leu Gly Ile Glu Phe Met Glu Ala
 248 50 55 60
 249 Glu Glu Leu Tyr Gln Lys Arg
 250 65 70
 252 <210> SEQ ID NO: 14
 253 <211> LENGTH: 49
 254 <212> TYPE: PRT
 255 <213> ORGANISM: Not relevant (recombinant)
 257 <400> SEQUENCE: 14
 258 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
 259 1 5 10 15
 260 Gly Gly Glu Cys Phe Met Val Lys Asp Pro Ser Arg Tyr Leu Cys Lys
 261 20 25 30
 262 Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr Val Met Ala
 263 35 40 45
 264 Ser
 267 <210> SEQ ID NO: 15
 268 <211> LENGTH: 48
 269 <212> TYPE: PRT
 270 <213> ORGANISM: Homo sapiens
 272 <400> SEQUENCE: 15
 273 Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His
 274 1 5 10 15
 275 Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn
 276 20 25 30
 277 Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Arg
 278 35 40 45
 280 <210> SEQ ID NO: 16
 281 <211> LENGTH: 49
 282 <212> TYPE: PRT
 283 <213> ORGANISM: Not relevant (recombinant)
 285 <400> SEQUENCE: 16
 286 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
 287 1 5 10 15

- Invalid response, see item 10
 on error summary
 sheet

- Same error

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/082,747

DATE: 06/17/2002

TIME: 12:50:58

Input Set : A:\476112USseqlist.txt

Output Set: N:\CRF3\06172002\J082747.raw

L:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date